



WILLIAM PATERSON UNIVERSITY HONORS COLLEGE RESEARCH DAY 2025

Monday, December 1

1:30—3:15 P.M.

David & Lorraine Cheng Library Auditorium

5:00—6:00 P.M.

University Commons Ballrooms

6:30—7:30 P.M.

David & Lorraine Cheng Library Auditorium

Thank you for joining us for Honors Research Day 2025! Each fall, the Honors College proudly showcases the research accomplishments of Honors students at William Paterson University. This year's afternoon and evening sessions will feature poster presentations by first-year students in the Honors 1000 Research Seminars, as well as senior thesis presentations by students completing one of the Honors College tracks.

***Congratulations to all the outstanding
students and faculty members who are participating
in Honors Research Day 2025!***

Monday December 1, 2025

PRESENTATION SCHEDULE

Afternoon Senior Presentations — Library Auditorium

Time	Name	Honors Track
1:30 p.m.	Matthew DiGirolamo	Clinical Psychology and Neuropsychology
1:45 p.m. — <i>Research Reflections with Honors College Alumni</i> <i>Kourtney Scipio, '24; Anna Segelken, '24; Diana Zuta, '25</i>		
2:00 p.m.	Adon Roy	Biology
2:15 p.m.	Ruma Parvin	Biology
2:30 p.m.	Luke Millevoi Fournier	Humanities
2:45 p.m.	Madison Knueppel	Humanities
3:00 p.m.	Dania Mustafa	Humanities
5:00-6:00 p.m.	<i>Poster Presentations by First-Year Honors Students — UC Ballrooms</i>	

Evening Senior Presentations — Library Auditorium

Time	Name	Honors Track
6:30 p.m.	Valentino E. Okanlawon	Humanities
6:45 p.m.	Niamh Morrison	Music
7:00 p.m.	Anders Pedersen	Music
7:15 p.m.	Owen Walter	Music

Research Day Presentations
5:00 — 6:00 p.m.
University Commons Ballrooms

Welcome — Dr. Barbara Andrew, Honors College Dean

Presentations — First-year Honors students enrolled in Honors 1000 Research Seminars

About the Honors Research Seminars

HON 1000-001 — *AI and Your Career*

Students are conducting research on the likely effects of AI on their chosen careers, which include music performance, music education, elementary education, business and forensic psychology.

HON 1000-002 — *Navigating Social Identity: Researching Belonging*

This course provides an intensive, interdisciplinary focus on Social Identity Theory (SIT). Students are engaging with diverse perspectives to analyze SIT's practical relevance to complex societal issues. The students conducted original research where they applied this theoretical framework to investigate a pressing interdisciplinary issue of their choice.

HON 1000-003 — *Civic Literacy as a Core Education Element*

Student research is broadly focused on the topic of Civic Literacy. Civic Literacy knowledge disparities based on socioeconomic factors or educational experiences are explored in students' projects. Students are also investigating social media correlations with civic literacy and civic literacy knowledge among specific student populations like student athletes.

HON 1000-004 — *Natural Sciences Research*

Carbohydrates are the body's main energy source, supporting brain function, speech and language processing, and athletic recovery. Good carbs like whole grains and fruits provide steady energy, while bad carbs such as sugary foods cause crashes and poor health. Choosing quality carbs helps maintain focus, communication, and performance. This presentation will focus on the group's findings about the role of carbohydrates in health and daily function.

HON 1000-005 — *Contemporary Global Health Topics in Nursing*

This seminar explores pressing global health challenges through the lens of nursing practice, examining how nurses navigate complex issues in a rapidly evolving healthcare landscape. Topics include the global nursing shortage, telemedicine, sleep deprivation, cosmetic nursing, pandemic response, and the mental and physical well-being of nursing students and professionals.

HON 1000-006 — *Ethical Frontiers of AI*

Students are researching the ethics of artificial intelligence (AI Ethics)—the ethical development and application of AI across all sectors of society and culture. Students are investigating AI Ethics through multiple lenses such as philosophy, law, art, music, media studies, education, rehabilitation, sport, and computer science.

HON 1000-001 — AI and Your Career

Dr. Jacob Felson, Associate Professor and Department Chair, Department of Sociology and Criminal Justice

Anish Bhatta	Ian Glover	Sophia Paulino	Jayla Stokes
Elizer Carmona	Monica Guzman	Ashanty Peralta	Henry Van Strein
Claire Delsalto	Emma Jurkic	Andrew Redling	Isaury Vega
Gabriel Freire	Bella Logan	Samantha Solovay	
Eliana Garcia	Hollie Maniscalco	Bethany Soto	

HON 1000-002 — Navigating Social Identity: Researching Belonging

Dr. Elizabeth Harkins, Associate Professor, Department of Special Education, Professional Counseling, and Disability Studies

Korinne Bakken	Stephanie Isaac	Alyssa Roberts	Sean Van Dalinda
Alexander Carlo	Jamal Khan	Jocelyn Rodriguez	Christian Yaras
Meliza Figuereo-Galva	Sharon Lopez	Madeline Rosania	
Jack Fossa	Anthony Pignatelli	Elyanna Serrano	
Dyabid Gurung	Jacob Ramirez	Bella Suarez	

HON 1000-003 — Civic Literacy as a Core Education Element

Mr. Neil Grimes, Education and Curriculum Materials Librarian

Mr. Gary Marks, Reference and Outreach Librarian

Megan Alt	Aylinn Gonzaga-Diaz	Iman Mamudi	Jocette Rosario
Patricia Blachut	Bibek Khadka	Favour Onwuzurike	Paulina Tarnowska-Bzdyra
Anyia De La Pena	Himalaya Mainali	Ramiah Palmer	SanaaYah Taylor
Anthony Garcia	Madison Maldonado	Marissa Peters-Nurse	Zachary Wright

HON 1000-004 — Natural Sciences Research

Dr. Nishikant Satam, Assistant Professor, Department of Chemistry

Caleb Alvaran	Kirsten Isaacs	Alondra Mejia-Lantigua	Mdsadman Sajit
Crystal Cameron	Axol Kamnik	Anthony Parise	Ava Schramm
Samantha Donovan	Amrit Lamichhane	Giuliana Pasquarella	Joshua Shaw
Emeli Giesler	Dave Lin	Mohammad Quaium	Jewel Stokes
Liliana Hartley	Tinashe Magura	Grace Ruitenberg	Hamza Tomouk

HON 1000-005 — Contemporary Global Health Topics in Nursing

Ms. Linda Salvesen, Systems Librarian

Ms. Nancy Weiner, Assistant Director, Access and Information Services Librarian

Natalia Aduna	Alessiana Cruz	Jonathan Joseph	Chizara Obi
Ana Ajo-Sanchez	Riley Elliott	Nikolaus Lesoine	Mariely Palomino
Leila Alvarez	Christine Esguerra	Paris Logan	Erin Roberts
Brenden Belar	Aaron Raphael Flores	Michaela Mitchell	Sean Singson
Jaquelyne Beristain	Andrea Gonzalez	Arianna Navarrete	Tatiana Suarez-Gomez
Leah Clifford	Amarachi Ike	Makayla Neal	Dron Zaveri

HON 1000-006 — Ethical Frontiers of AI

Dr. Peter Mandik, Professor, Department of History, Philosophy, and Liberal Studies

Jasmin Ali	Demond Kinchen	Alexandra Mouzakiti	Leah Yates
Salma Bayat	Charles King	Joseph Ramirez	
Robert Freimark	Rosymar Marquez	Ireland Reynolds	
Katherine Inglis	Fiona Morrison	Shelby Swank	

SENIOR PRESENTERS *(listed in alphabetical order)*



MATTHEW DIGIROLAMO

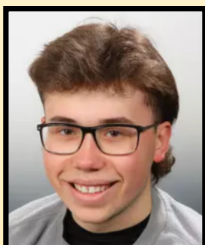
Honors Track: Clinical Psychology and Neuropsychology

Major: Computer Science

Thesis Title: *Concussions and Cognitive Decline in Baseball Players*

Thesis Advisor: Dr. Bruce Diamond

This thesis reviews baseball players who sustain concussions from hit-by-pitches, foul tips, batted balls, and player collisions, and how those injuries may impact the long-term brain health of the athletes. Although incidents are less common in baseball, they still are clinically meaningful with clear position-specific vulnerabilities. Short-term performance on the field shows small nonsignificant declines, but the real problems arise in attention issues, slower reaction times, and other impacts on day-to-day life that is not shown in the box scores. The main concern is the long-term risk. Constant head-impact is linked to memory deficits, executive function, psychomotor speed, and can lead to possible neurodegenerative consequences. The review also notes the limitations on baseball-specific data, but outlines practical steps, such as improved equipment, possible rule changes, baseline and season-long neurocognitive monitoring, and rehabilitation assignments that integrate cognitive and motor retraining.



LUKE MILLEVOI FOURNIER

Honors Track: Humanities

Major: Physical Education and Health

Thesis Title: *The Steroid Era*

Thesis Advisor: Dr. K. Molly O'Donnell

Steroids in baseball is a controversial topic that really changed how fans think about the game. Baseball in the 1990s became known as "The Steroid Era". This left fans with mixed feelings about the game and about the players. My thesis asks whether steroids changed the game and what records we should trust. My research uses game footage, interviews, court records, news articles, social media, and baseball statistics. I ask, have steroids made the game more popular, and how it still resonates today. My results find that the fans appreciate the game more without steroids in the game. The excitement of watching players compete with certain technology may not be as satisfying as some fans may think.



MADISON KNUEPPEL

Honors Track: Humanities

Major: Secondary Education and English

Thesis Title: *Book Bans: A real page turner!*

Thesis Advisor: Dr. K. Molly O'Donnell

My thesis project focuses on banned books and the impact of the bans on authors, audiences, and communities. The number of books being banned and the rapid rate of the bans has raised concern amongst readers. My thesis discusses four of the top 25 banned books nationally: *All Boys Aren't Blue* by George M. Johnson;

Flamer by Mike Curato, *Gender Queer: A Memoir* by Maia Kobabe; and *This Book is Gay* by Juno Dawson. These four titles all fall in or touch on the same category: LGBTQ+ youth sexuality. As new explorations of LGBTQ+ identity emerge in young adult literature, book banning is emerging as a counter reaction against these developments. At the end of my research, the results suggest how to be more educated about the emerging suppression of books for young adults, especially those with LGBTQ+ themes and what we can do to preserve literary freedom. Book banning not only censors what we as American people can read, but it also beseeches our first amendment right of freedom of speech.



NIAMH MORRISON

Honors Track: Music

Major: Jazz Voice and Secondary Education

Thesis Title: *Gretchen Parlato: Expanding the Jazz Vocal Tradition*

Thesis Advisor: Dr. Christopher Herbert

This research examines the artistic contributions of jazz vocalist Gretchen Parlato, focusing on her innovative approach to vocal technique, musical style, and creative expression. By analyzing interviews and literature, this study explores how Parlato is emblematic of a significant change in the style and the role of jazz singers between the late 2000s and early 2010s. The research provides historical background on trends and jazz/jazz-adjacent vocalists and instrumentalists from Joni Mitchell to Esperanza Spalding, who influenced and ran parallel to Parlato's career. The paper addresses questions about the distinguishing musical elements of Parlato's style, its departure from traditional jazz standards, and her influence on other vocalists in the modern jazz scene. In doing so, it sheds light on the evolution of the jazz vocal tradition and recognizes Parlato's role in bridging the traditional roots of jazz with modern experimentation.



DANIA MUSTAFA

Honors Track: Humanities

Major: Elementary Education and History

Title: *Tatreez: A Living Tradition*

Thesis Advisor: Dr. K. Molly O'Donnell

My thesis focuses on the craft of Palestine embroidery, also known as *Tatreez* (تَطْرِيز) as a cultural, historical, and political symbol. Tatreez is made using colorful cross stitches to create large motifs and patterns. Passed down through generations of women, tatreez reflects the rich history and artistic traditions of Palestine, promoting a deep sense of connection and belonging among Palestinian communities worldwide. My study connects the tatreez to broader history, heritage, and culture of Palestine.

**VALENTINO E. OKANLAWON****Honors Track:** Humanities**Major:** Computer Information Technology**Thesis Title:** *My Staircase Wit, My Esprit d'Escalier***Thesis Advisor:** Dr. K Molly O'Donnell

This creative thesis investigates how personal grief can be transformed into intentional action and lasting design. *Esprit d'Escalier*, or staircase wit, names the ache of realizing what should have been said after the moment has passed. Following the sudden cardiac death of someone close to me in 2023, that sensation became permanent. It was not a missed line. It was a missed last chance. In response, I developed Japanese Sorrows, a clothing practice that functions as a belated reply and an ethic of making with urgency. After several iterations in scope and material, the final work is a four piece capsule in black washed Japanese Sashiko denim: two jackets and two jeans, one set for a male model and one set for a female model. Select gemstone and rivet details are integrated as points of held light. A leather belt with the phrase "esprit d'escalier" in rivets was prototyped but not included in the final count. The thesis combines academic analysis with controlled creative passages, treating clothing as a vessel for memory and a practice of repair.

**RUMA PARVIN****Honors Track:** Biology**Major:** Biology**Thesis Title:** *Assessing triazole susceptibilities and PDR1 mutations within a series of Candida glabrata vulvovaginal candidiasis isolates***Thesis Advisor:** Dr. Kelley R. Healey

Recurrent vulvovaginal candidiasis (RVVC) caused by *Candida glabrata* presents a significant therapeutic challenge due to its reduced susceptibility to azole antifungals. To better understand resistance development in *C. glabrata* RVVC, I analyzed 17 total isolates taken from two individual patients over a 2.5-to-3-year span. I first determined fluconazole and voriconazole susceptibilities of each isolate through broth microdilution assays. Then, I isolated genomic DNA and PCR-amplified and sequenced *PDR1*, a transcription factor that regulates expression of drug-efflux pumps and azole resistance. Of the first patient's series of 11 isolates, strains #1 through 6 were susceptible to both azoles and exhibited wild-type *PDR1* sequences, while strains #7 through 11 demonstrated resistance to both drugs and contained a D1082G amino acid substitution in Pdr1. All 6 isolates in the second series were resistant and contained P626T and L946S Pdr1 alterations. My results highlight the significance of *PDR1* mutations in azole-refractory *C. Glabrata* RVVC.

**ANDERS PEDERSEN****Honors Track:** Music**Major:** Digital Music Creation**Minor:** Music & Entertainment Industry**Thesis Title:** *Love Thy Neighbor: Liner Notes for an Album About the Unconsidered Underbelly of New York City***Thesis Advisor:** Dr. Christopher Herbert

This project focuses on a self-made album, *Love Thy Neighbor*, which is inspired by the grit, grime and the unconsidered underbelly of New York City. One particular song from the album, "Cuck Flounder", about the criminal Daniel Rakowitz, is discussed in detail, including the writing process, the musical components, and the historical inspiration. Special attention is paid to Rakowitz and his cannibalistic abuse of the East Village community. In addition, the paper also outlines the labor-intensive recording and mixing process, along with the origin story of the band Green City Trees.

**ADON ROY****Honors Track:** Biology**Major:** Biology**Thesis Title:** *Overexpression and Function Analysis of a Karenia brevis caspase-3-like gene in E. coli Lacking the N-terminal Helicase Domains***Thesis Advisor:** Dr. Emily Monroe and Dr. Carey Waldburger

Karenia brevis is the dinoflagellate responsible for harmful algal blooms in the Gulf of Mexico. Programmed Cell Death has been proposed to be involved in bloom decline, but the precise mechanisms remain unclear. A caspase-3-like gene (*Kb-cas3*) was identified in a *K. brevis* transcriptome. Previous attempts to express the full-length gene in *E. coli* were unclear. The objective of this project was to determine if the N-terminal helicase domains were interfering with expression. I made a DNA construct of *Kb-cas3* lacking the N-terminal helicase domains in a pET-46 EK/LIC vector and overexpressed this protein in *E. coli* BL21/pLysS using IPTG. Western blots showed a His-tagged protein of the expected size was present in induced cells and not in uninduced cells or negative controls. Caspase activity was inconclusive. Further optimization and alternative expression hosts may be necessary to characterize the role of *Kb-cas3* in *K. brevis* cell death and bloom termination.

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OWEN WALTER

Honors Track: Music

Major: Jazz Studies and Performance

Thesis Title: *Documenting a Regional Legacy: Tracing the Collaboration of Hank Marr and Rusty Bryant, 1954-1968*

Thesis Advisor: Dr. Christopher Herbert

From the beginnings of jazz during the early twentieth century, the state of Ohio played an important role in the development and mobility of the genre. Predating the prevalence of air travel, Ohio served as a frequent stop for touring acts due to its location in the United States. Although the idea of Ohio as a musical crossroads is what the state is most remembered for today in the context of jazz, it created and was home to many local jazz musicians who never moved to a larger city, such as New York, Chicago, or Los Angeles. In an effort to preserve the local jazz history of the state of Ohio, this paper investigates the rich history of the relationship between two of the state's most revered local jazz musicians: Hank Marr (1927-2004) and Rusty Bryant (1927-1991). Although there is existing literature about these two musicians as separate performers, they had a lifelong musical relationship that has gone largely unnoticed since Bryant died in 1991 and Marr's death in 2004. By referring to existing literature in addition to thorough research of newspaper and music periodical archives, this study aims to provide a new, fuller, and comprehensive history of the complex and exciting relationship between Marr and Bryant. The overview begins with the release of "All Nite Long," the first major recording success on which the two collaborated, and ends with the musical separation of the two artists due to Bryant being signed to Prestige Records in 1968. Ultimately, through reconstructing the musical biographies of these two important musicians, the paper sheds light on a largely forgotten era in Ohio jazz history and aims to inform those who otherwise would remain in the dark about these two Ohio Jazz Musicians.

About the Honors College at William Paterson University...

In the University Honors College, students explore new ideas and engage in intellectual and creative collaborations with outstanding professors in a community that brings together students' academic, residential, social, and cultural experiences. The Honors College offers a rigorous curriculum with a challenging array of courses, seminars, and co-curricular activities, along with faculty and staff mentors who offer support throughout a student's college career.

WILLIAM PATERSON UNIVERSITY HONORS COLLEGE

Barbara Andrew

Dean

Elizabeth Harkins

Honors College Fellow

Jan Pinkston

Associate Director

Kourtney Scipio

Graduate Assistant

Helenah Comia and Rory Stansfield

Office Assistants

Angie Marcucilli, Preston Nieuwenhuis,

Thays Paiva-Dealmeida, Rory Stansfield,

Owen Walter, and Sarah Weissberg

Honors Peer Leaders

— TRACK DIRECTORS —

Dr. Barbara Andrew

Independent

Dr. K. Molly O'Donnell

Humanities

Dr. Bruce Diamond

Clinical Psychology
and Neuropsychology

Dr. David Gilley

(Interim) Biology

Dr. Christopher Herbert

Music

Dr. Marianne Sullivan

Global Public Health

Dr. Amy Learmonth

Cognitive Science

Dr. Danielle Wallace

Social Sciences

Dr. John Malindretos

Business

Dr. Martha Witt

Performing and Literary Arts

Dr. Lisa Foley

Nursing



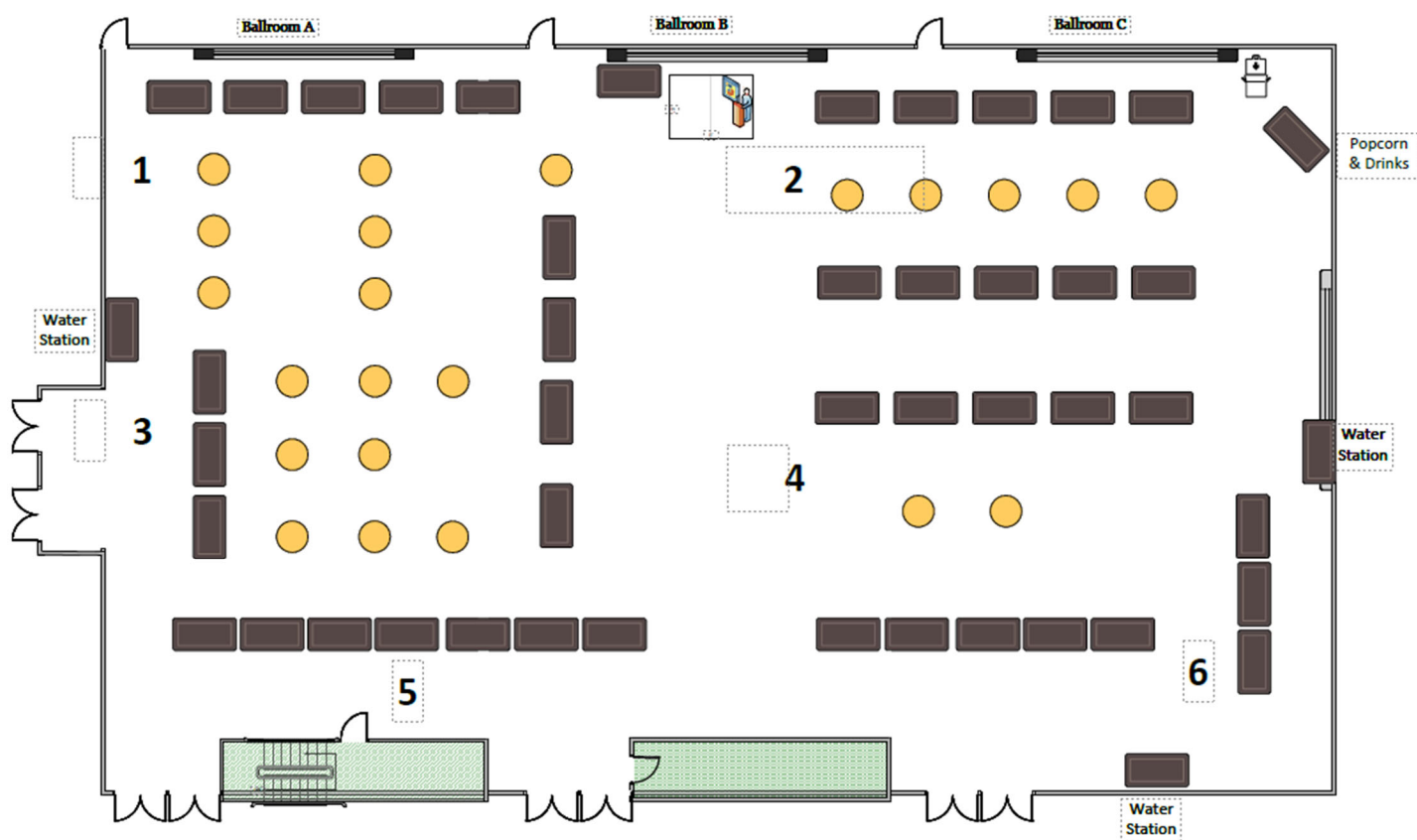
Save the Date!

**Spring 2026 Honors
Research Week**

April 20—24, 2026

*Showcasing the research of over
70 Honors College Seniors!*

*The full schedule and more details
will be available in the spring.*

Honors 1000 Seminar Presentations**5:00—6:00 p.m.****University Commons Ballrooms*****1—Navigating Social Identity: Researching Belonging******2—Natural Sciences Research******3—AI and Your Career******4—Ethical Frontiers of AI******5—Civic Literacy as a Core Education Element******6—Contemporary Global Health Topics in Nursing***